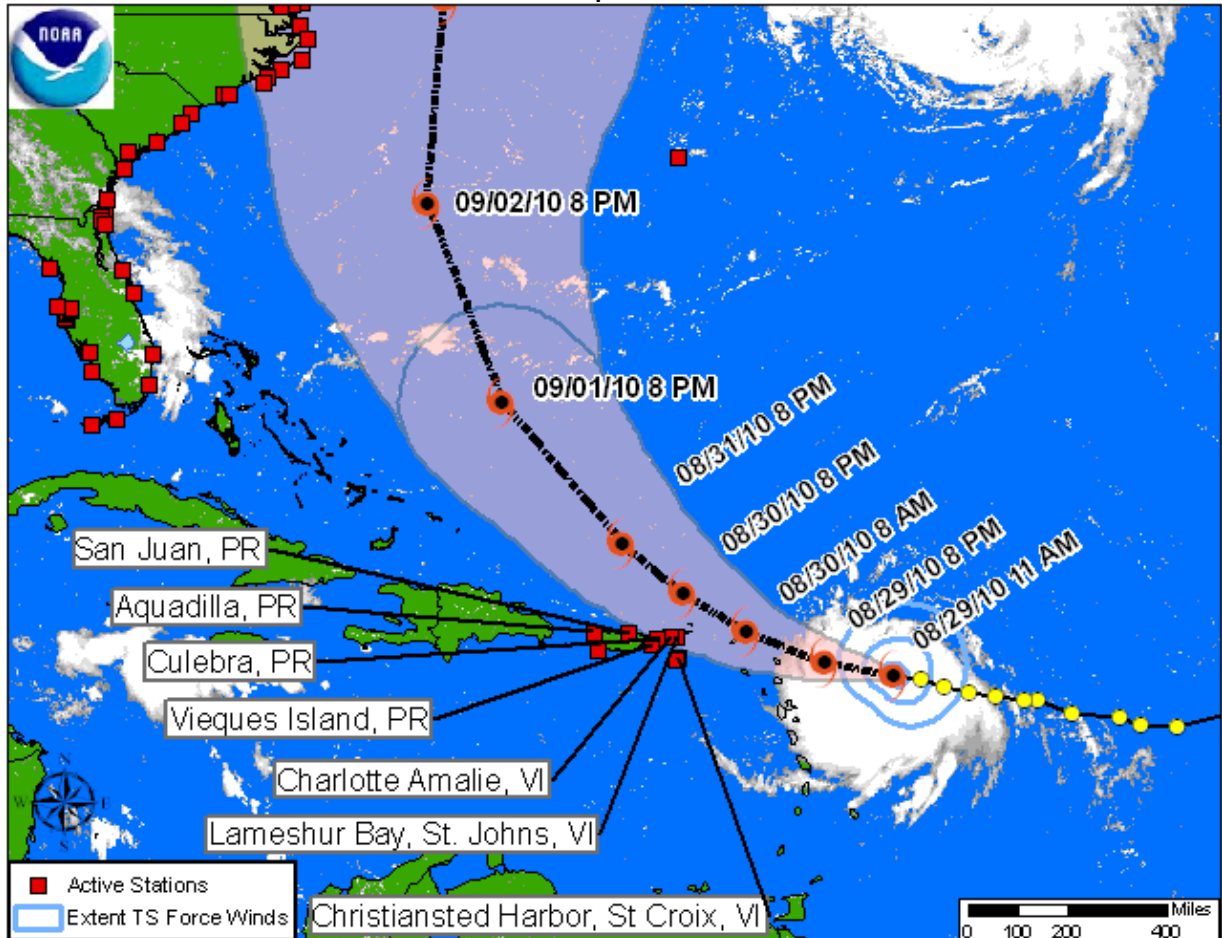




Hurricane EARL QuickLook  
Posted: 12:00 AST 08/29/2010

NOAA and NOAA Partnership Stations Relative to the Storm



#### Storm Analysis

As of 08/29/2010 12:00 EDT, water levels across the U.S. Virgin Islands and Puerto Rico are about 0.4 to 0.5 feet above predictions.

Wind speeds are generally ranging from 5 to 10 kts with some gusts up to 22 kts at San Juan PR and 31 kts at Christiansted Harbor, St. Croix, USVI. Barometric has begun to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

CHRISTIANSTED HARBOR, ST CROIX, VI Next predicted high tides are 0.59 ft (0.18 m) at 08/29/2010 12:13 AST and 0.48 ft (0.15 m) at 08/29/2010 22:07 AST.

**LAMESHUR BAY, ST. JOHN, VI** Next predicted high tides are 0.66 ft (0.20 m) at 08/29/2010 13:20 AST and 0.45 ft (0.14 m) at 08/30/2010 00:14 AST.

**CHARLOTTE AMALIE, VI** Next predicted high tides are 0.78 ft (0.24 m) at 08/29/2010 13:30 AST and 0.82 ft (0.25 m) at 08/30/2010 14:50 AST.

**CULEBRA, PR** Next predicted high tides are 0.90 ft (0.27 m) at 08/29/2010 13:10 AST and 0.70 ft (0.21 m) at 08/30/2010 00:22 AST.

**ESPERANZA, VIEQUES ISLAND, PR** Next predicted high tides are 0.53 ft (0.16 m) at 08/29/2010 12:08 AST and 0.48 ft (0.15 m) at 08/29/2010 21:24 AST.

**SAN JUAN, PR** Next predicted high tides are 1.56 ft (0.48 m) at 08/29/2010 13:11 AST and 1.16 ft (0.35 m) at 08/30/2010 00:29 AST.

**AGUADILLA, PR** Next predicted high tides are 1.28 ft (0.39 m) at 08/29/2010 12:11 AST and 1.00 ft (0.30 m) at 08/30/2010 00:10 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) Homepage.

Analyst:WFR

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**SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:**

**TROPICAL STORM EARL ADVISORY NUMBER 17**

**1100 AM AST SUN AUG 29 2010**

**...EARL EXPECTED TO STRENGTHEN AS IT HEADS TOWARD THE NORTHERN LEEWARD ISLANDS...**

**LOCATION NEAR LATITUDE 17.2 NORTH, LONGITUDE 58.4 WEST  
ABOUT 225 MI E OF ANTIGUA  
ABOUT 315 MI E OF ST. MARTIN**

**WATCHES AND WARNINGS**

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**SUMMARY OF WATCHES AND WARNINGS IN EFFECT...**

**A HURRICANE WATCH IS IN EFFECT FOR...**

**\* U.S. VIRGIN ISLANDS**

**\* PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

**A TROPICAL STORM WARNING IS IN EFFECT FOR...**

**\* U.S. VIRGIN ISLANDS**

**\* PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

**HURRICANE CONDITIONS ARE EXPECTED WITHIN THE WARNING AREA BEGINNING WITHIN 24 HOURS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD BE RUSHED TO COMPLETION.**

**HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA WITHIN THE NEXT 36 HOURS.**

**A TROPICAL STORM WARNING MEANS THAT TROPICAL STORM CONDITIONS ARE EXPECTED WITHIN THE TROPICAL STORM WARNING AREA WITHIN 36 HOURS.**

**DISCUSSION AND 48-HOUR OUTLOOK**  
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**AT 1100 AM AST...1500 UTC...THE CENTER OF HURRICANE EARL WAS LOCATED NEAR LATITUDE 17.2 NORTH...LONGITUDE 58.4 WEST. EARL IS MOVING TOWARD THE WEST NEAR 17 MPH. A TURN TOWARD THE WEST-NORTHWEST WITH A GRADUAL DECREASE IN FORWARD SPEED IS EXPECTED DURING THE NEXT DAY OR SO. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR OR OVER THE NORTHERN LEEWARD ISLANDS TONIGHT AND MONDAY.**

**MAXIMUM SUSTAINED WINDS ARE NEAR 75 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY ONE HURRICANE ON THE SAFFIR-SIMPSON HURRICANE WIND SCALE. STRENGTHENING IS EXPECTED DURING THE NEXT 48 HOURS AND EARL IS FORECAST TO BECOME A MAJOR HURRICANE BY TUESDAY.**

**HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 30 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 160 MILES.**

**HAZARDS AFFECTING LAND**  
-----

**WIND...TROPICAL STORM CONDITIONS ARE EXPECTED IN THE WARNING AREA LATER TODAY...WITH HURRICANE CONDITIONS EXPECTED BY EARLY MONDAY MORNING. TROPICAL STORM CONDITIONS ARE EXPECTED TO SPREAD OVER THE VIRGIN ISLANDS AND PUERTO RICO ON MONDAY...WITH HURRICANE CONDITIONS POSSIBLE MONDAY NIGHT.**

**STORM SURGE...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 1 TO 3 FEET ABOVE GROUND LEVEL PRIMARILY NEAR THE COAST IN AREAS OF ONSHORE WIND WITHIN THE WARNING AREA. THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS BATTERING WAVES.**

**RAINFALL...EARL IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 3**

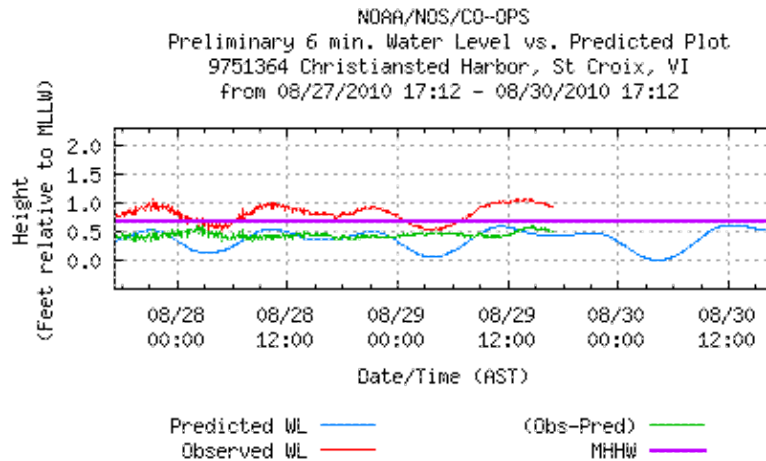
**TO 5 INCHES OVER MUCH OF THE NORTHERN LEEWARD ISLANDS...WITH POSSIBLE ISOLATED MAXIMUM AMOUNTS OF 8 INCHES. EARL IS EXPECTED TO PRODUCE TOTAL RAIN ACCUMULATIONS OF 4 TO 6 INCHES OVER PUERTO RICO...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES POSSIBLE OVER HIGHER ELEVATIONS. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES.**

**FORECASTER BROWN/BERG**

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#), [Christiansted Harbor, St Croix - Barometric](#), [Christiansted Harbor, St Croix - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Winds](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [San Juan - Air/Water Temp](#), [Aguadilla - Water Level](#), [Aguadilla - Barometric](#), [Aguadilla - Air/Water Temp](#),

**Christiansted Harbor, St Croix, VI** - [Return to List](#)

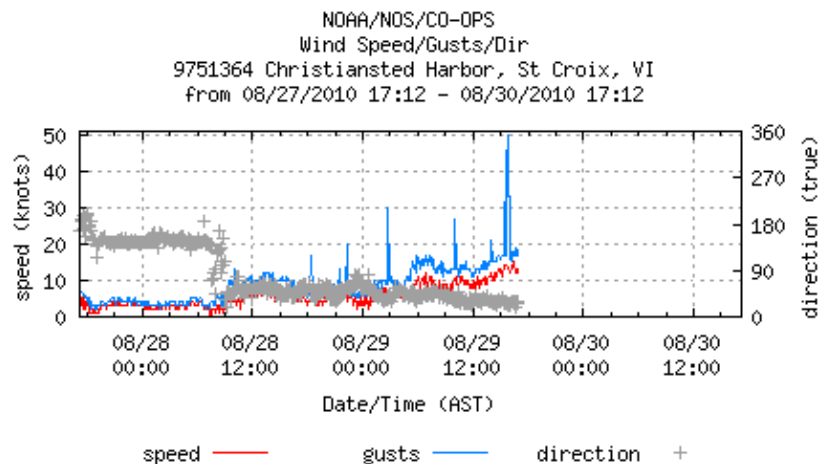


Last Observed Sample: 08/29/2010 16:54 (AST)

Relative to **MLLW**: **Observed: 0.94 ft.** **Predicted: 0.43 ft.** **Residual: 0.51 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.73 ft. above **MHHW**

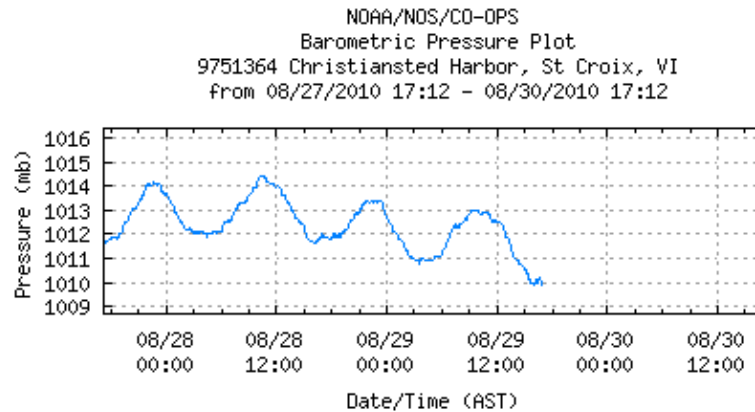
**Christiansted Harbor, St Croix, VI** - [Return to List](#)



Last Observed Sample: 08/29/2010 16:54 (AST)

**Wind Speed: 12 knots** **Gusts: 17 knots** **Direction: 027° T**

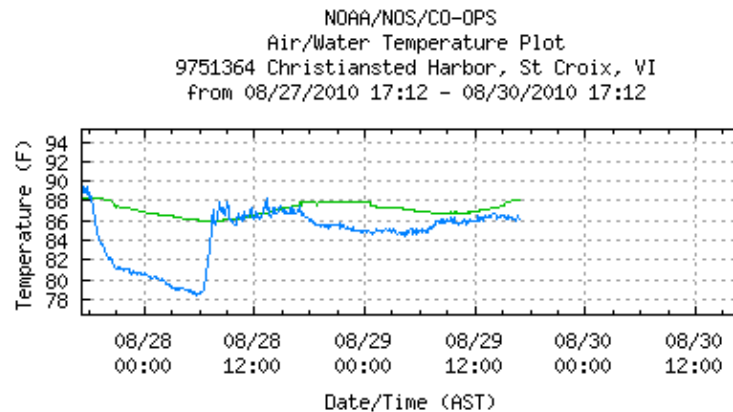
**Christiansted Harbor, St Croix, VI** - [Return to List](#)



**Last Observed Sample: 08/29/2010 16:54 (AST)**

**Barometric Pressure: 1009.9 mb**

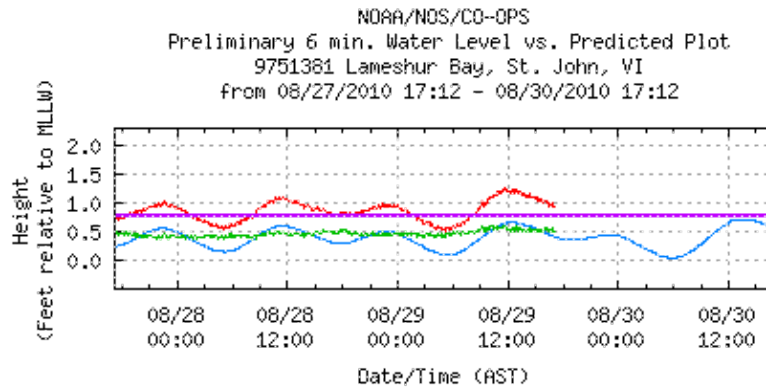
**Christiansted Harbor, St Croix, VI** - [Return to List](#)



**Last Observed Sample: 08/29/2010 16:54 (AST)**

**Water Temperature: 88.0° F Air Temperature: 86.2° F**

**Lameshur Bay, St. John, VI** - [Return to List](#)



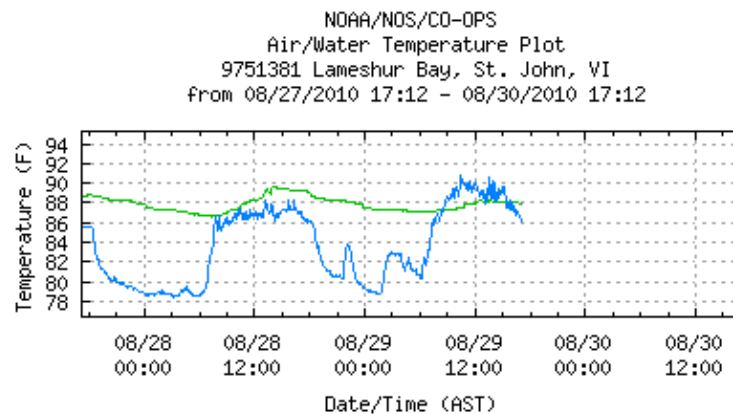
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 0.94 ft. Predicted: 0.42 ft. Residual: 0.52 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.83 ft. above **MHHW**

**Lameshur Bay, St. John, VI** - [Return to List](#)

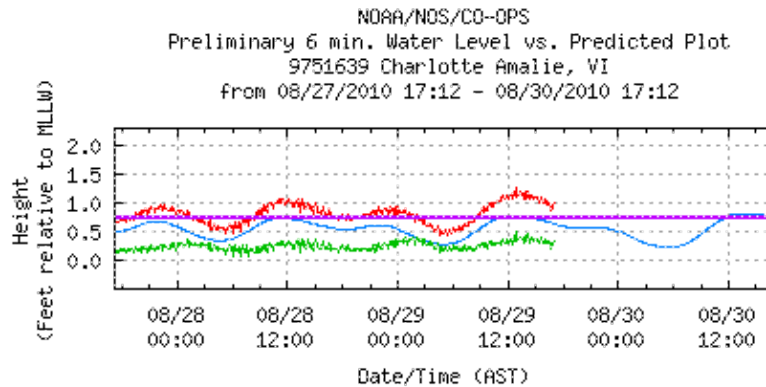


water temp. — air temp. —

Last Observed Sample: 08/29/2010 17:00 (AST)

**Water Temperature: 87.8° F Air Temperature: 86.2° F**

**Charlotte Amalie, VI** - [Return to List](#)

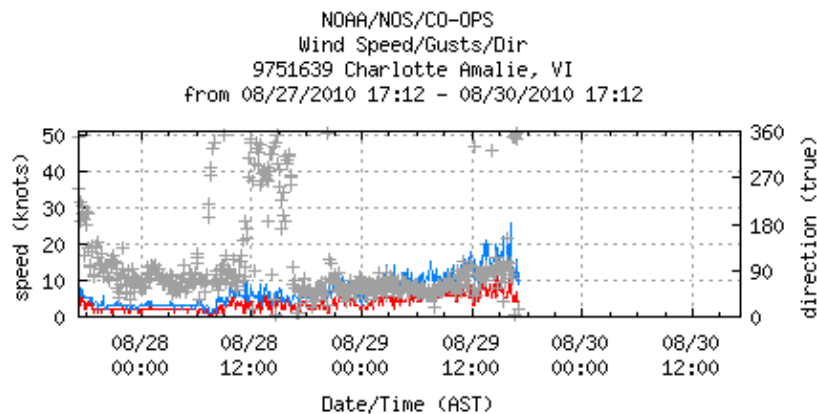


Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 0.99 ft. Predicted: 0.64 ft. Residual: 0.35 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above **MHHW**

**Charlotte Amalie, VI** - [Return to List](#)

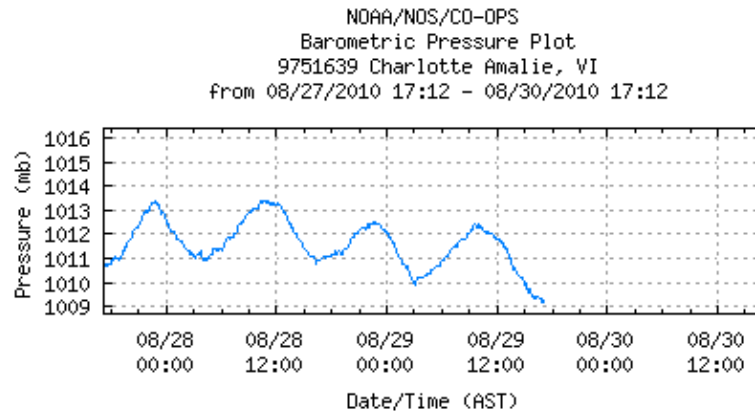


Last Observed Sample: 08/29/2010 17:00 (AST)

**Wind Speed: 4 knots Gusts: 9 knots Direction: 014° T**



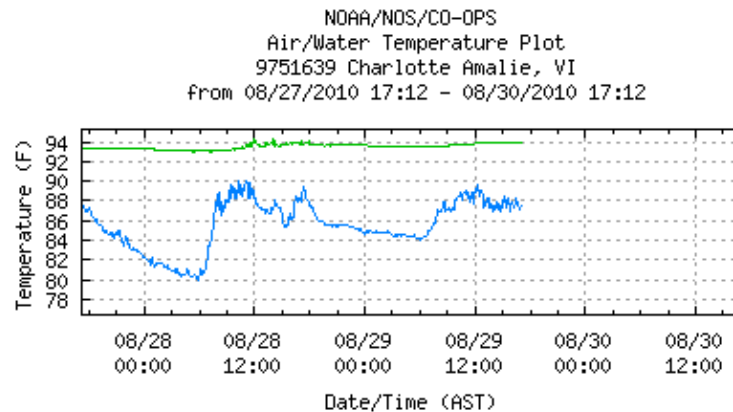
**Charlotte Amalie, VI** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Barometric Pressure: 1009.2 mb

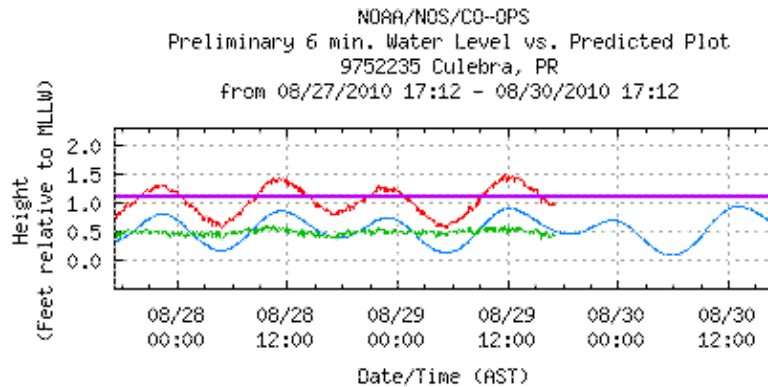
**Charlotte Amalie, VI** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Water Temperature: 93.9° F Air Temperature: 87.5° F

**Culebra, PR** - [Return to List](#)



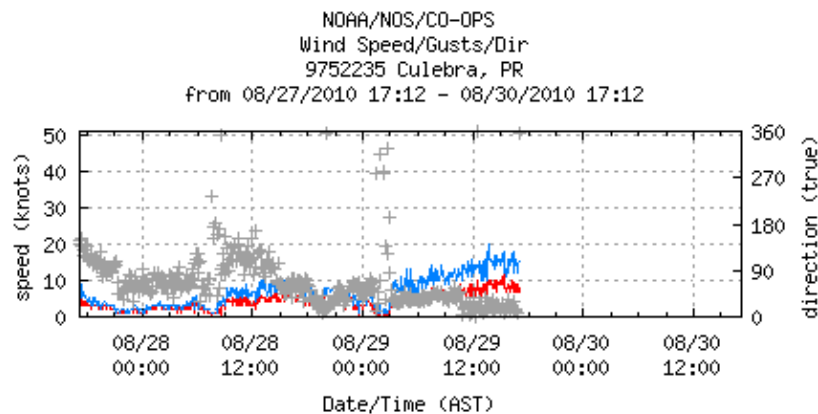
Predicted WL — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 0.97 ft. Predicted: 0.52 ft. Residual: 0.45 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.86 ft. above **MHHW**

**Culebra, PR** - [Return to List](#)

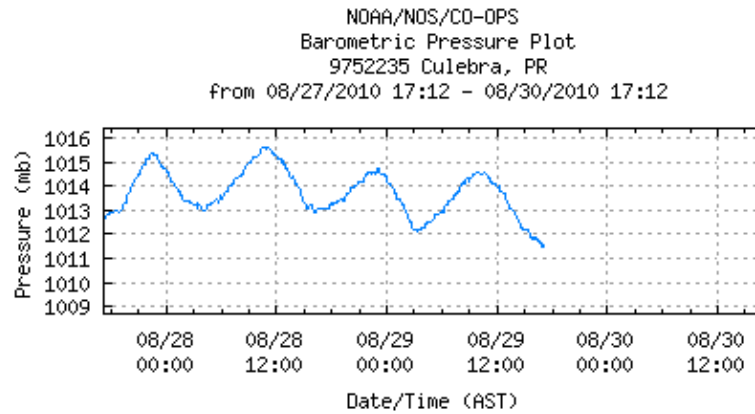


speed — gusts — direction +

Last Observed Sample: 08/29/2010 17:00 (AST)

**Wind Speed: 7 knots Gusts: 15 knots Direction: 357° T**

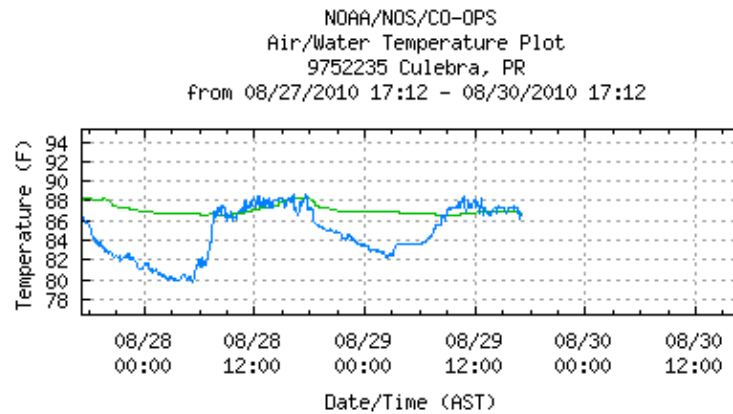
**Culebra, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Barometric Pressure: 1011.5 mb

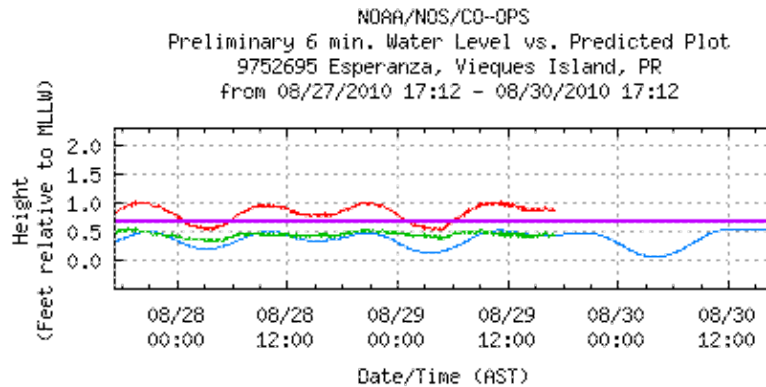
**Culebra, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Water Temperature: 86.7° F Air Temperature: 86.5° F

**Esperanza, Vieques Island, PR** - [Return to List](#)

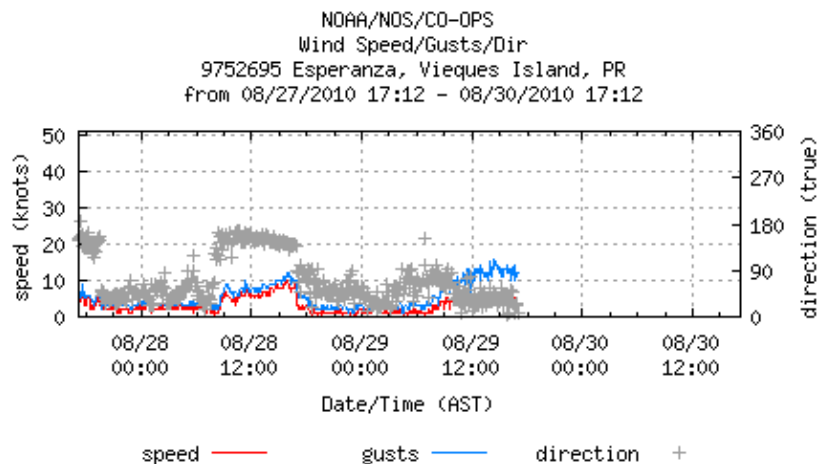


Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 0.88 ft.** **Predicted: 0.44 ft.** **Residual: 0.44 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.83 ft. above **MHHW**

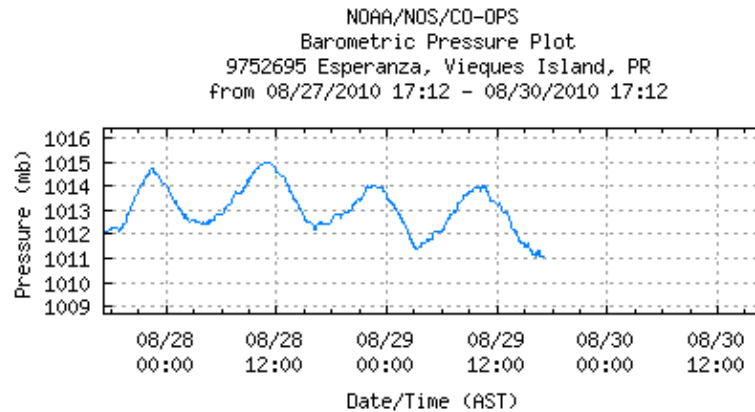
**Esperanza, Vieques Island, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

**Wind Speed: 3 knots** **Gusts: 12 knots** **Direction: 008° T**

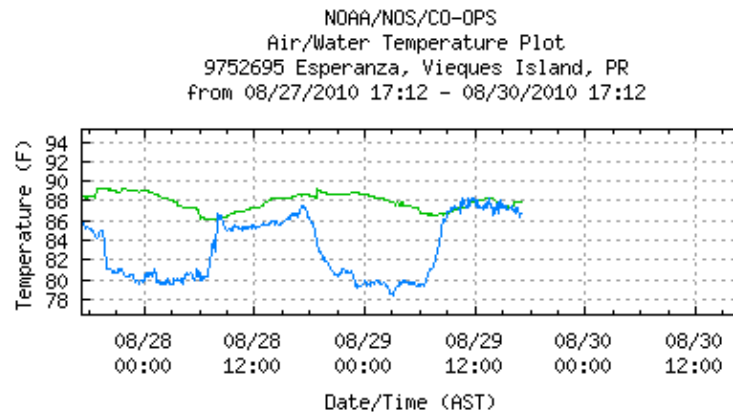
**Esperanza, Vieques Island, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Barometric Pressure: 1011.1 mb

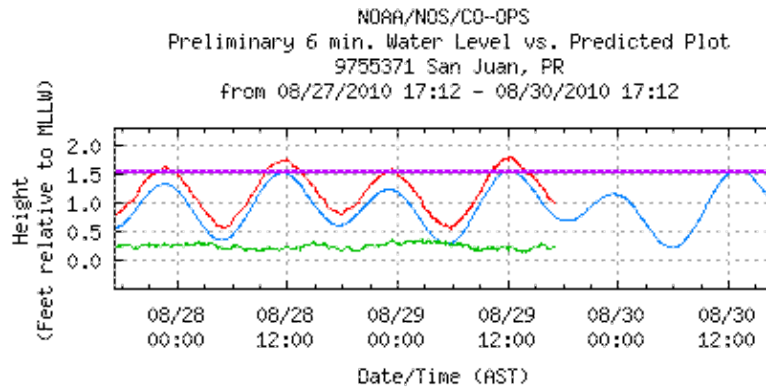
**Esperanza, Vieques Island, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

Water Temperature: 87.8° F Air Temperature: 86.7° F

**San Juan, PR** - [Return to List](#)

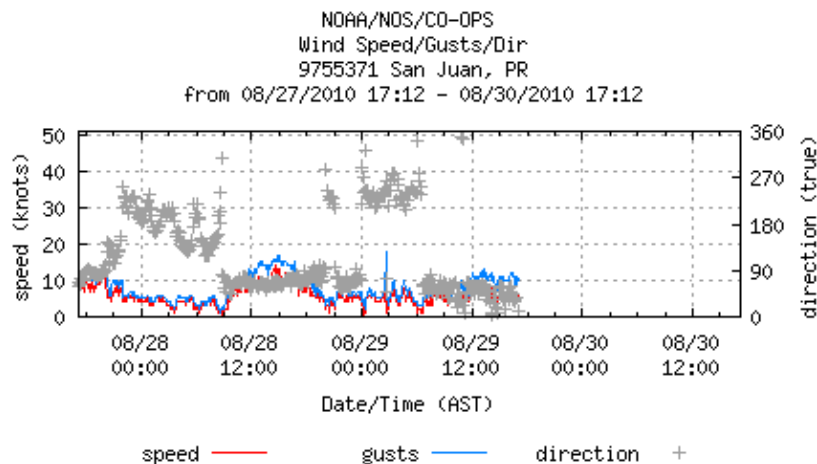


Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 1.01 ft. Predicted: 0.78 ft. Residual: 0.23 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above **MHHW**

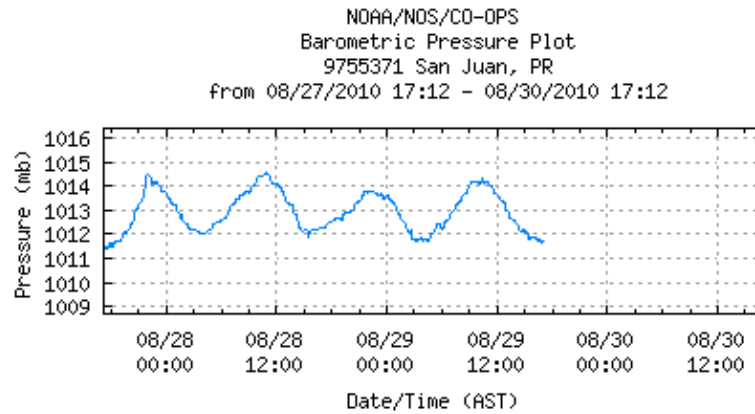
**San Juan, PR** - [Return to List](#)



Last Observed Sample: 08/29/2010 17:00 (AST)

**Wind Speed: 6 knots Gusts: 10 knots Direction: 012° T**

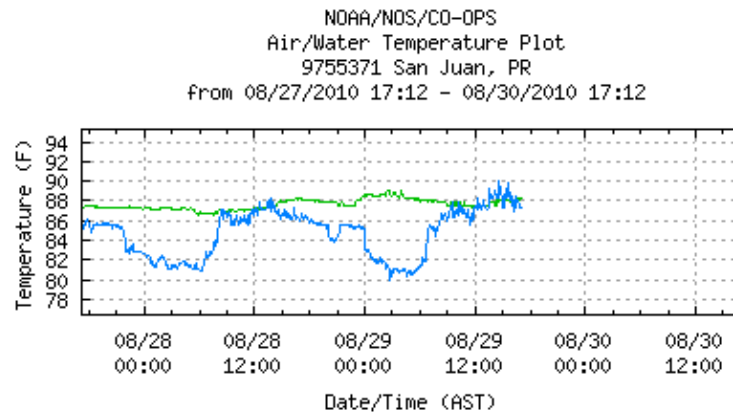
**San Juan, PR** - [Return to List](#)



**Last Observed Sample: 08/29/2010 17:00 (AST)**

**Barometric Pressure: 1011.7 mb**

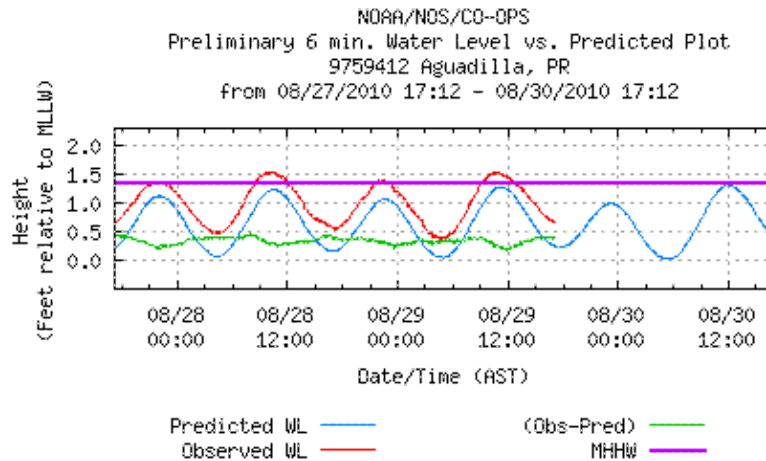
**San Juan, PR** - [Return to List](#)



**Last Observed Sample: 08/29/2010 17:00 (AST)**

**Water Temperature: 88.2° F Air Temperature: 87.4° F**

**Aguadilla, PR** - [Return to List](#)

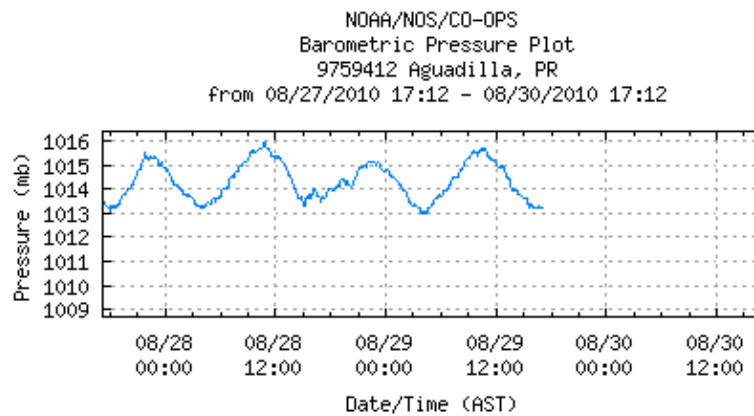


Last Observed Sample: 08/29/2010 17:00 (AST)

Relative to **MLLW**: **Observed: 0.66 ft. Predicted: 0.26 ft. Residual: 0.40 ft.**

Historical Maximum Water Level: Oct 28 2007, 0.95 ft. above **MHHW**

**Aguadilla, PR** - [Return to List](#)



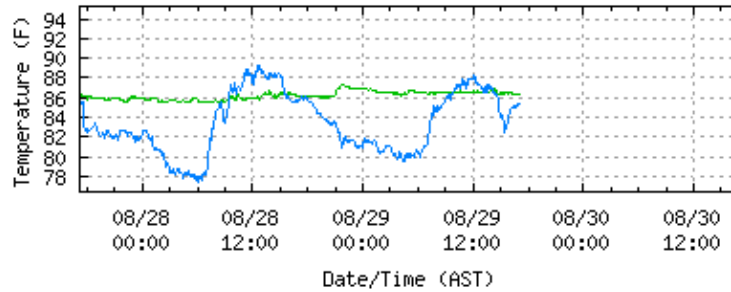
Last Observed Sample: 08/29/2010 17:00 (AST)

**Barometric Pressure: 1013.2 mb**



**Aguadilla, PR** - [Return to List](#)

NOAA/NOS/CO-OPS  
Air/Water Temperature Plot  
9759412 Aguadilla, PR  
from 08/27/2010 17:12 - 08/30/2010 17:12



water temp. — air temp —

**Last Observed Sample: 08/29/2010 17:00 (AST)**

**Water Temperature: 86.4° F Air Temperature: 85.3° F**

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
National Oceanic and Atmospheric Administration | U.S. Department of Commerce